

Supplementary material

Table S1. Methods used to assess density of brown hare in the two study areas (R – Rogów, D – Dobieszyn)

* data from the Department of Wildlife Management, WULS

Mode of estimation	Parameter	Years	Habitat	Season	Study area	Sample size
Belt assessment*	n ind./100 ha	1965 - 2003	fields	autumn and (in most years) preceding spring	Rogów	one census per season/per year; 19 in autumn, 14 in spring
Spot-light counts	n ind./100 ha	2004 – 2015 in both areas; 2016 – 2018 only in Rogów	fields	spring and/or autumn	Rogów, Dobieszyn	n of counts: R – 36 (28 in autumn, 8 in spring), D – 25 (20 in autumn, 5 in spring)
Driving census*	n ind./100 ha	1983 - 2018	forest	spring	Rogów	one census per year, 27 in total
Snow tracking	n tracks/1 km/24 h	2011	fields, forest	winter	Rogów, Dobieszyn	total transect length: R - 71.1; D - 45.4 n of transects: R – 66; D - 43
Pellet group counts	n pellet groups/1 km	2011	fields	spring	Rogów, Dobieszyn	total transect length: R - 52.61; D - 37.76 n of stretches: R – 575; D - 428

Table S2. Changes in food composition (% share of food items) of red fox in Rogów (central Poland) in three periods as based on food remains collected at natal dens. Source of data: 1978 – 1991 (Goszczyński 1995), 1999 – 2002 (Juszko 2006), 2011 – 2021 (this study).

Food type	Period		
	1978 – 1991	1999 – 2002	2011 – 2021
Hen <i>Gallus gallus domesticus</i>	54.1	32.1	36.4
Domestic pigeon <i>Columba livia domestica</i>	4.1	3.1	1.2
Domestic duck <i>Anas platyrhynchos</i> f. <i>domestica</i>		3.1	
Domestic birds total	58.2	38.3	37.6

Wood pigeon <i>Columba palumbus</i>	0.3	0.0	0.3
Common pheasant <i>Phasianus colchicus</i>	4.1	4.1	0.3
Grey partridge <i>Perdix perdix</i>	1.8	1.0	
Other species and indefinite	12.4	20.4	15.4
Birds total	76.8	63.8	53.6
Cattle	0.6		0.5
Domestic dog <i>Canis familiaris</i>	1.0		0.4
Domestic cat <i>Felis catus</i>	0.6	1.5	3.5
Red fox <i>Vulpes vulpes</i>		1.0	
Moose <i>Alces alces</i>			0.1
Red deer <i>Cervus elaphus</i>			0.1
Fallow deer <i>Dama dama</i>			0.1
Roe deer <i>Capreolus capreolus</i>	1.3	6.1	4.3
Wild boar <i>Sus scrofa</i>	0.6	3.6	2
Domestic pig <i>Sus domestica</i>			6.8
Coypu <i>Myocastor coypus</i>	0.6		
Marten <i>Martes spp.</i>	0.2		0.1
European beaver <i>Castor fiber</i>			0.1
Indefinite		2.6	2.1
Carrion total	4.9	14.8	20.1
European hare <i>Lepus europaeus</i>	12.7	4.1	0.1
Wild rabbit <i>Oryctolagus cuniculus</i>	0.6		
Domestic rabbit <i>Oryctolagus cuniculus</i> f. <i>domesticus</i>			0.4
Least weasel <i>Mustela nivalis</i>	0.2		0.3
Hedgehog <i>Erinaceus spp.</i> , mole <i>Talpa europaea</i> , shrew <i>Sorex spp.</i>	3.6	7.1	3.8
Red squirrel <i>Sciurus vulgaris</i>			0.2
Norway rat <i>Rattus norvegicus</i>			0.6
Small rodents	1.2	2.6	6.9
Reptile			0.9
Amphibian			0.4
Fishes			3.4
Indefinite		5.1	
Human refuse		2.6	9.2
Total number of items	606	196	960